

Eupitheciæ that appear to be Undescribed.

By RICHARD F. PEARSALL, Brooklyn, N. Y.

E. valariata n. sp.

Expanse, 20 mm.—palpi short, stout, dark brown. Antennæ slender, flattened, shortly ciliate in ♂. Front and vertex, pale ashen gray, the former with dark brown line above clypeus. Thorax with narrow band of dark brown, crossing above scutellar region. All the rest of the body and wings above with ground color of light gray, heavily sprinkled with ruddy brown scales. On primaries, which are narrow, somewhat produced apically, these are massed broadly along costa, and inner margin, less so subterminally, leaving cell a somewhat clearer gray; vein below cell, brokenly barred with black. Abdomen without black ring, the dorsal tufts on central segments, small, clear white. A series of fine indistinct lines, crossing primaries are formed by the ruddy scales, the basal with strong outward angle below costa, almost touches wing base at inner margin, and the discal and intradiscal run parallel with it, the latter passing through the small, but distinct black discal spot. The extra discal, broader and slightly darker, rounding out about cell, runs straight, with a slight basal trend to inner margin. Parallel with this are three or four hair lines, traceable in submarginal space. The pale geminate line, usually following extra discal, and the white sub-terminal line are wanting in this species. Marginal black line faint, broken. Secondaries clear, except several broad, short lines at inner margin. No discal dots. Fringes on all wings long grayish. Beneath, pale ashen, the primaries flecked with darker scales. No lines as above, but the geminate pale line beyond extra discal is quite apparent, and extends sometimes across secondaries, in which case it is bordered by a broken line of dots at crossing of veins, externally. Discal dots dusky somewhat diffuse. Legs and body sprinkled with dark brown scales. Abdomen beneath clear white centrally with lateral borders of dark brown, dusky at tip.

Types—Two ♂ ♂ and two ♀ ♀ from San Diego California, through Mr. L. E. Ricksecker, the former labeled III-9 and 10th, the latter III 10 and 12th, 1910, all in authors collection.

When fresh, these examples were veiled with a roseate blush, which quick fades into the ruddy brown as described.

E. cognizata n. sp.

Expanse, 22 mm. Palpi short, stout, dark brown. Front, dark brown centrally, with margins and vertex paler, almost white. An-

tennae stout. bi-fasciculate ciliate, dark brown above, ringed with white. Thorax broadly banded across front with dark brown, behind which there is a central patch of clear white scales, more distinct in front, extending over the scutellar region. Primaries ample, a little extended apically, above a golden brown, with cross lines and veinings of dark brown and black. Discal dots round moderately large, distinct, black. The dark basal area, is succeeded by a paler space centrally, crossed by a suffused dark line. A geminate pale line precedes the discal line, which is broad at costa crosses it with a gentle curve, then at median vein, makes a sharp angle toward discal dot, receding and becoming a straight hair line below to middle of inner margin. Three or four fine lines sub-parallel to this cross discal space, darkening it somewhat, the outer one forming the extra discal, hardly darker than the others, and less sharply angled below costa. The pale geminate line is broad, rather clearly defined. Subterminal space veined with dark brown and black and having a sprinkling of white scales apically, is divided centrally by a clear white much broken line, with a large spot between veins 3 and 4 and at vein 1, terminating in a sharply defined V. Marginal line on all wings heavy black, broadly broken at veins inwardly crescentic between them. Fringes on all ♀ wings long silken yellowish brown, cut with dark spots at end of veins. Secondaries pale yellowish ashen. The inner margin broadly overlaid with color of primaries, less distinctly so along outer border. A few dark brown cross lines and the geminate pale line, show at inner margin but all disappear before reaching center, except the two at base which faintly reach the costal margin in direct lines. Discal dots large, dusky, blurred. Abdomen clothed with rough dark and yellow brown scales. Segments at terminal margin narrowly edged with white. Tufts not apparent. A narrow black lateral line on second and third segments. Beneath dusky yellowish ashen, darker on primaries. Two pale geminate lines start from costa on either side of the jet black linear discal dot, and merge below it into a single line, running straight to inner margin. Outside the dark brown extra discal which outwardly margins the pale lines mentioned, and is quite well marked—the usual geminate pale line, as above, is clearly defined and runs across wing with a gentle outward curve below costa. The inception of the dark lines is heavy, almost black at costa. The subterminal space has a series of pale lateral dashes through it. On secondaries three dusky brown lines cross wing within the black linear discal spot. The fourth is more waved and darker, and just passes the lower point of the discal spot. At costa it has a dusky diffuse brown spot, and is quite well marked at inner margin. Outside this is the broad geminate pale band, its outer margin curved outward to parallel border of wing, and indi-

cated by a row of dots on veins subterminal space as on primaries, but less distinct. Body and legs silvery ashen, the latter heavily covered in part with dark brown scales. Abdomen dusky at tip.

Type.—A perfect ♂ from Witch Creek, California, taken II, 15, '09, by Mr. H. W. Marsden. Another ♂ in only fair condition from the same locality has been in my possession for several years, but too much rubbed to constitute a type. This I have made a cotype. Both are in my collection.

(To be continued)

Collecting and Mounting Micro-Diptera.

By E. T. CRESSON, JR.

In the little experience I have had in the collecting and mounting of Micro-Diptera, methods have been developed which I find very satisfactory and greatly enhance the value of a collection of these small insects. Altho the methods may not be new to many collectors, still there are some to whom these notes will be of aid. The common absence of good series of Micro-Diptera in most collections I have examined, is due no doubt to their small size, but especially to the fact that entirely different methods must be employed, than are usual with the larger insects, in collecting and mounting, to insure perfect specimens. This subject, I will divide into two instalments, of which the first will be upon collecting. My experience in this line has been done mostly in quest of the members of the Acalyptrate family Ephydriidae, to which my remarks will pertain more especially, and to those insects having similar habits and habitat; but the same methods may be used with the small insects of other orders.

It is at once seen that the net proper (cone) is simply a large funnel with its small end projecting about one and a half inches into the bag (pocket); out on the base or large end of the cone is sewn a separate piece (band) which in case of detachable rims, can be turned over and sewed permanently as shown, or, for solid rims, if one wishes to have a detachable